Remarks

Claim Rejections Under 35 USC 102

The claims are rejected as being anticipated by Tabata.

Valid rejection under 35 USC 102 requires that each feature of a rejected claim be disclosed in a single reference. "For anticipation under 35 USC 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." MPEP 706.02(a)

Tabata does not teach an evaporator arrangement with a porous evaporator medium. Therefore, the present invention is not anticipated by Tabata.

Claim Rejections Under 35 USC 103

Claim 11 is rejected as being obvious over Tabata. The Office Action maintains that it would have been obvious to one of ordinary skill in the art to modify Tabata to include a heat exchanger for the purpose of removing and using heat created in the evaporator. This assumptions regarding Tabata simply are not correct. The following explains why the present invention should be allowable, and is not obvious over Tabata.

An abstract of the Tabata reference is included herewith.

Applicant respectfully maintains that the Office Action's statements regarding the newly cited reference to Tabata are simply incorrect. According to the abstract of Tabata, Tabata clearly shows that Tabata does not teach an evaporator arrangement with a porous evaporator medium, in contrast to the present invention.

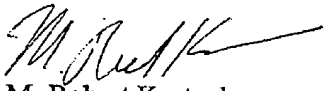
To the contrary, Tabata teaches a reformer fed with hydrocarbon gas that is mixed with air in a piping 15 and fed through a burner port plate 18. On the downstream side of the burner port 18 the (gaseous) mixture of hydrocarbon gas and air is ignited by ignition

plug 19 to preheat a reforming catalyst 17. Obviously, Tabata teaches hinges on the fact that the hydrocarbon fuel is natural gas, i.e., gaseous. Tabata's device does not and cannot teach an evaporator medium for transforming liquid hydrocarbon fuel into the gas phase, because natural gas and air are already in gas phase. Therefore, an evaporator medium is completely useless with Tabata's device.

In order to emphasize the difference between Tabata and the present invention, claim 1, line 4, has been amended to include the term "liquid" as follows: "for supplying liquid hydrocarbon to the porous evaporator medium (16, 16a)".

Wherefore further consideration and allowance of the claims, as amended, is respectfully requested.

Respectfully submitted,



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CERTIFICATE OF FAX TRANSMISSION

I hereby certify under 37 CFR §1.8 that this correspondence is being submitted by facsimile transmission to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 07/27/2006, fax number (571) 273 8300.

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PATENT ABSTRACTS OF JAPAN

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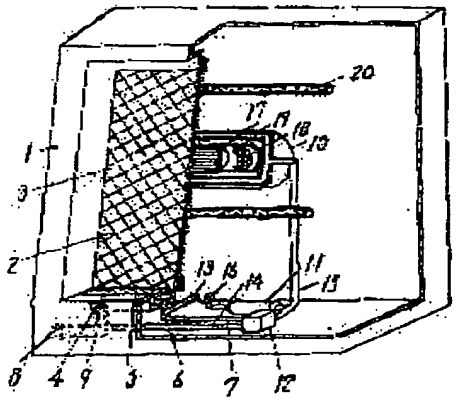
(54) CATALYST BURNER DEVICE

(57)Abstract:

PURPOSE: To perform smooth operation during rise of burning, by a method wherein hydrocarbon gas is divided into two lots, the one lot for heating a catalyst oxide mat is connected to one piping, while the other lot for heating a forming catalyst and for modifying reaction is connected to the other piping.

CONSTITUTION: One of the two lots, into which natural gas is divided by an electromagnetic valve 12, is mixed with the air in a piping 15 to feed it in a fuel modifying device 10. Within the fuel modifying device 10, flame is formed on a burner port plate 18 with the aid of an ignition plug 19 to preheat a reforming catalyst 17. Meanwhile, after natural gas, which is branched by the electromagnetic valve 12 and is fed to a piping 7, is mixed, within a duct 6, with the air which is fed from an air intake port 8 through a piping 9, flame is formed on a burner port plate 4 to preheat a catalyst oxide mat 3. This reduces a time required for preheating, and allows exhaust gas, produced after reforming catalyst is preheated, to be utilized for preheating of the catalyst oxide mat.



LEGAL STATUS

[Date of request for examination]

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